

**NOTE:**

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, CITY OF MUSKEGON STANDARD SPECIFICATIONS AND THE 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THESE IMPROVEMENTS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE 2004 AASHTO GUIDELINES.

# CITY OF MUSKEGON

## PLAN AND PROFILE OF PROPOSED SMITH RYERSON PARKING LOT IMPROVEMENTS

### PROJECT NUMBER: SP-240

## UTILITIES

**ELECTRIC**  
MICHELLE ANDREA  
CONSUMERS ENERGY  
700 E STERNBERG ROAD  
NORTON SHORES, MI 49441  
(231) 332-2601

**TELEPHONE**  
DAVID B. FLERMOEN  
FRONTIER COMMUNICATIONS  
860 TERRACE STREET  
MUSKEGON MI 49440  
(231) 727-1319

**GAS**  
VINCENT DUCA  
DTE ENERGY  
2359 OLTHOFF DRIVE  
MUSKEGON MI 49444  
(231) 578-0488 (CELL)

**CABLE**  
JIM STITZEL  
COMCAST  
700 W BROADWAY AVENUE  
MUSKEGON, MI 49441  
(810) 217-1642

**WATER & SEWER**  
WYATT EARP, DAVE BAKER  
CITY OF MUSKEGON DPW  
1350 E KEATING AVENUE  
MUSKEGON MI 49442  
(231) 724-4100

**INDEX TO SHEETS**

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1.	TITLE SHEET
2.	CONSTRUCTION DETAL
3.	PARKING LOT LAYOUT AND PAVEMENT MARKING DETAIL
4.	UTILITY PLAN AND PROFILE

**GENERAL NOTES:**

- UPON REQUEST AND APPROVAL, THE CONTRACTOR MAY OBTAIN A WATER SUPPLY FROM THE CITY OF MUSKEGON FIRE HYDRANTS AT NO COST, PROVIDED THAT THEY FOLLOW THE CONDITIONS OF THE CITY WATER DEPARTMENT.
- FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CALL MISS DIG, 1-800-482-7171, A MINIMUM OF 3 WORKING DAYS EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO EXCAVATING IN THE VICINITY OF ALL UTILITY LINES. ALL MISS DIG PARTICIPATING MEMBERS WILL THUS BE NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR THE RESPONSIBILITY OF NOTIFYING OWNERS WHO MAY NOT BE PART OF THE MISS DIG ALERT SYSTEM.
- PUBLIC UTILITIES OF ALL TYPES HAVE BEEN SHOWN ON THE PLAN USING AVAILABLE INFORMATION, BUT ARE NOT GUARANTEED AS ACCURATE OR THAT UTILITIES OTHER THAN THOSE SHOWN ARE NOT PRESENT.
- THE CONTRACTOR SHALL SAW CUT ALL MEETS RELATIVE TO SIDEWALK OR PAVEMENT CONSTRUCTION UNLESS WAIVED BY THE ENGINEER. PAYMENT FOR SAW CUTTING SHALL BE INCLUDED IN THE PAYMENT FOR THE PAY ITEMS PAVT, REM, MODIFIED, CURB AND GUTTER, REM, HMA CRUSH AND SHAPE, HMA SURFACE, REM AND SIDEWALK, REM. NO ADDITIONAL PAYMENT WILL ALLOWED FOR SAW CUTTING.
- THE CONTRACTOR SHALL PREVENT EROSION AND CONTROL SEDIMENTATION ASSOCIATED WITH THE PROJECT. KEEP SEDIMENTATION WITHIN THE RIGHT OF WAY (OR CONSTRUCTION LIMITS) AND OUT OF SURFACE WATERS. CONSTRUCT AND MAINTAIN TEMPORARY EROSION AND SEDIMENTATION CONTROLS, TO INCLUDE INLET PROTECTION, FABRIC DROPS ON ALL INLET STRUCTURES NEW AND EXISTING AND INSTALL TEMPORARY EROSION, SEDIMENTATION CONTROLS AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL REMOVE ON A DAILY BASIS SOIL TRACKED ONTO EXISTING PAVED ROADS, (VACUUM METHODS ARE PREFERRED BUT BROOM SWEEPING IS ACCEPTABLE IF THE MATERIAL IS REMOVED) THE CONTRACTOR SHALL INSPECT ALL SOIL EROSION / SEDIMENTATION CONTROL MEASURES ON A WEEKLY BASIS OR AFTER EACH RAIN FALL EVENT. CLEAN REPAIR, OR REPLACE, AS NECESSARY, TO ENSURE PROPER FUNCTION. ALL SOIL EROSION / SEDIMENTATION CONTROLS SHALL REMAIN UNTIL ALL DISTURBED AREAS ARE STABILIZED. ALL SOIL EROSION / SEDIMENTATION CONTROL, EXCEPT FOR THE EROSION CONTROL, INLET PROTECTION, FABRIC DROP AND SILT FENCE SHALL BE INCLUDED WITH THE PAY ITEM PROJECT CLEAN UP. NO OTHER PAYMENT SHALL BE MADE.



3 WORKING DAYS  
EXCLUDING SAT, SUN & HOLIDAYS  
**BEFORE YOU DIG  
CALL MISS DIG**

Know what's below.  
Call before you dig.

CONSTRUCTION INCLUDES HMA CRUSHING, EARTH WORK, AGGREGATE BASE, HMA PAVEMENT, AND PAVEMENT MARKINGS ON SMITH RYERSON PARKING LOT, IN CITY OF MUSKEGON, MUSKEGON COUNTY.

PREPARED UNDER THE SUPERVISION OF:

LEO EVANS, P.E.  
CITY ENGINEER

CITY OF MUSKEGON  
ENGINEERING DEPARTMENT  
1350 E KEATING AVE  
MUSKEGON MI 49442

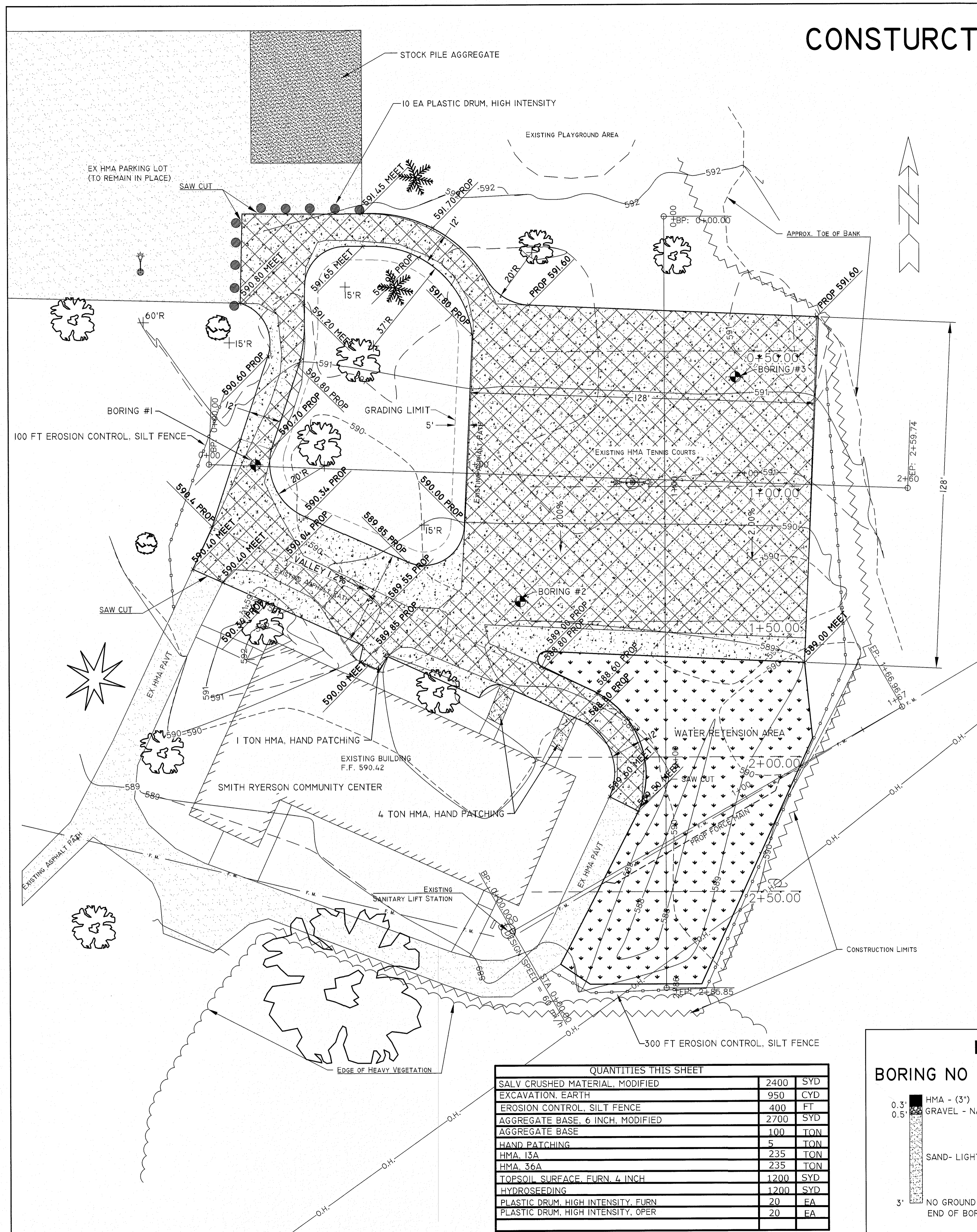
55599  
REGISTRATION NUMBER

<b>CITY OF MUSKEGON</b>		<b>SMITH RYERSON</b>	
<b>OFFICE OF THE CITY ENGINEER</b>		<b>PARKING LOT</b>	
DRAWN J BROOKENS 07/2018	REVISION	SURVEY H LARSON 07/2018	PROJECT NO
CHECKED	REVISION	AS-BUILT	<b>SP-240</b>
APPROVED	REVISION		

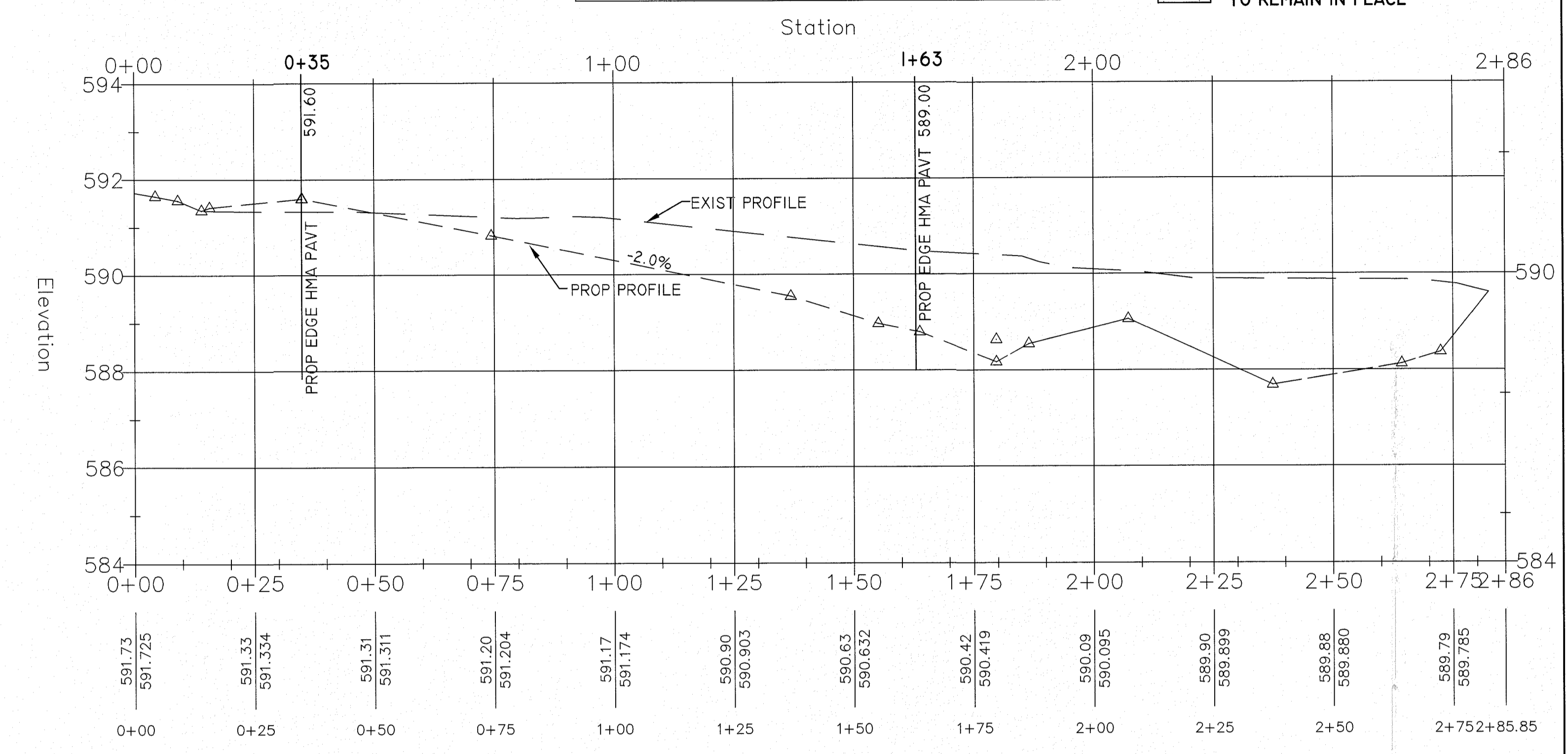


# CONSTRUCTION DETAIL

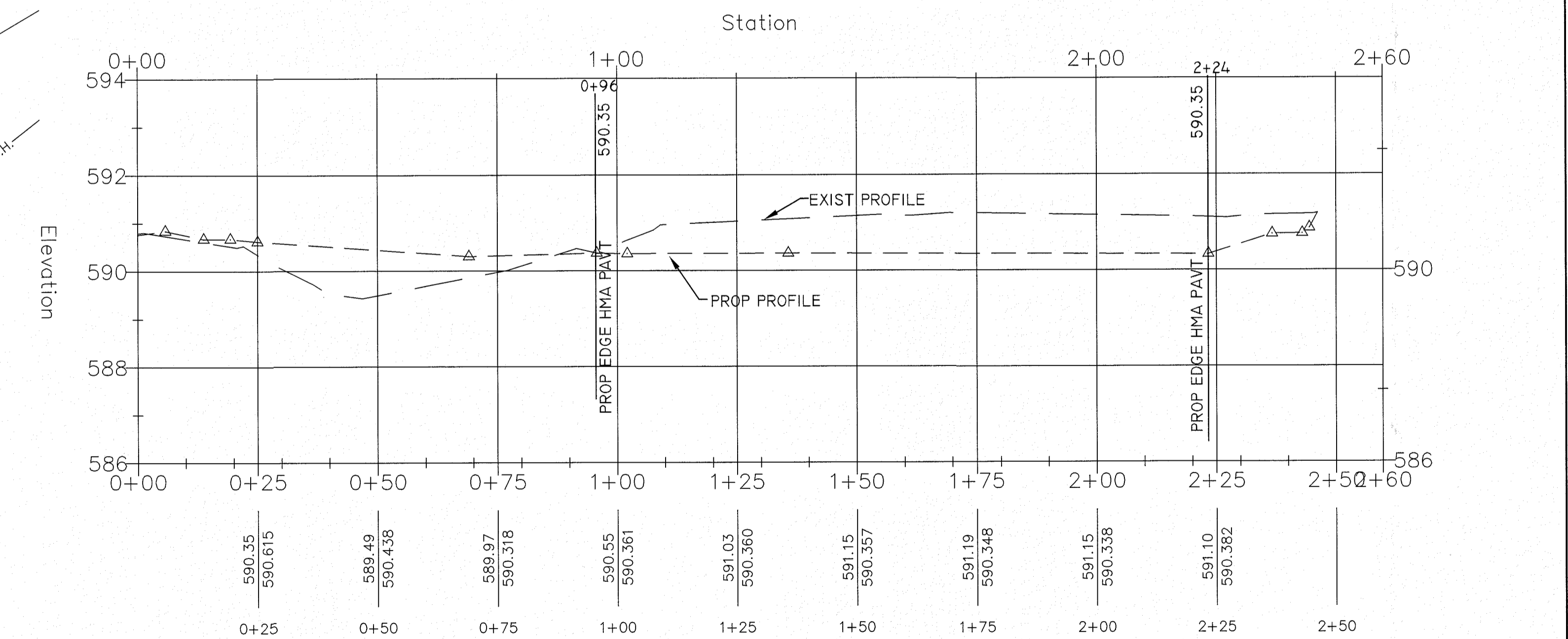
- = EXIST HMA, SALVAGE CRUSHED MATERIAL
- = NEW HMA PAVEMENT
- = AREA TO BE GRADED FOR WATER RETENTION
- = EX HMA PAVEMENT TO REMAIN IN PLACE



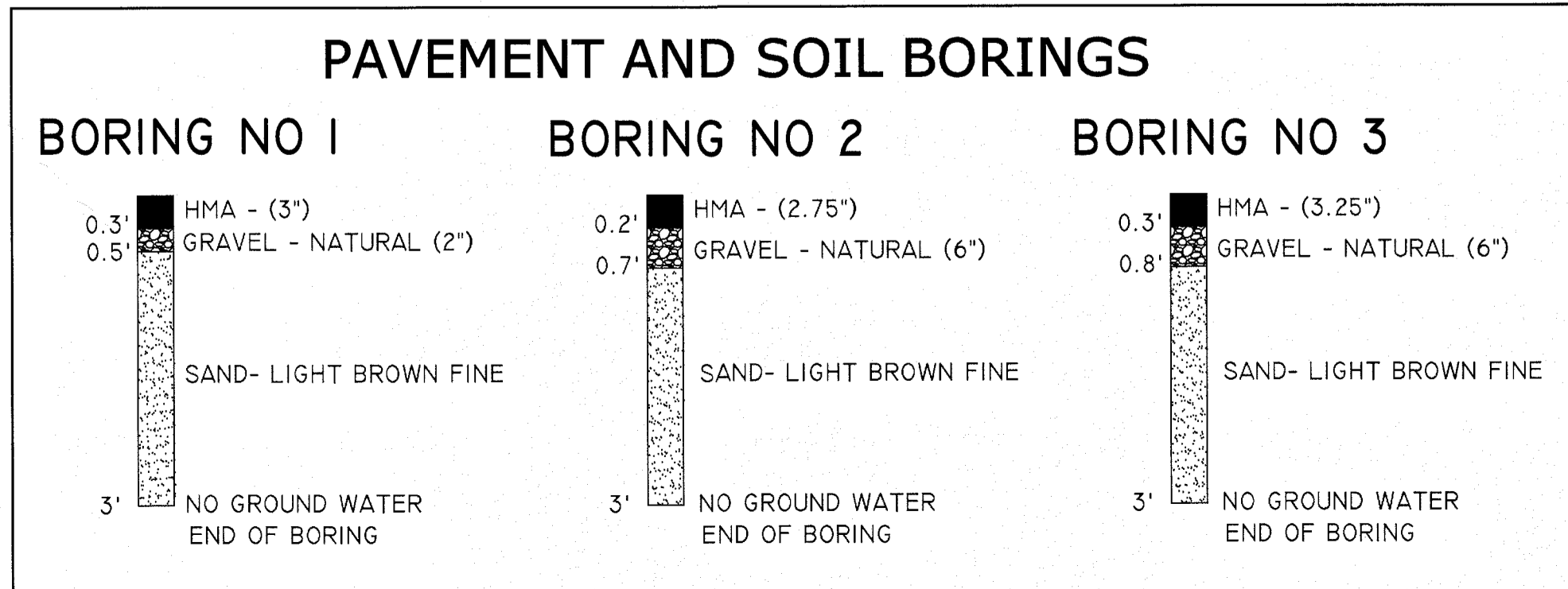
north-south (1) PROFILE



east-west (1) PROFILE

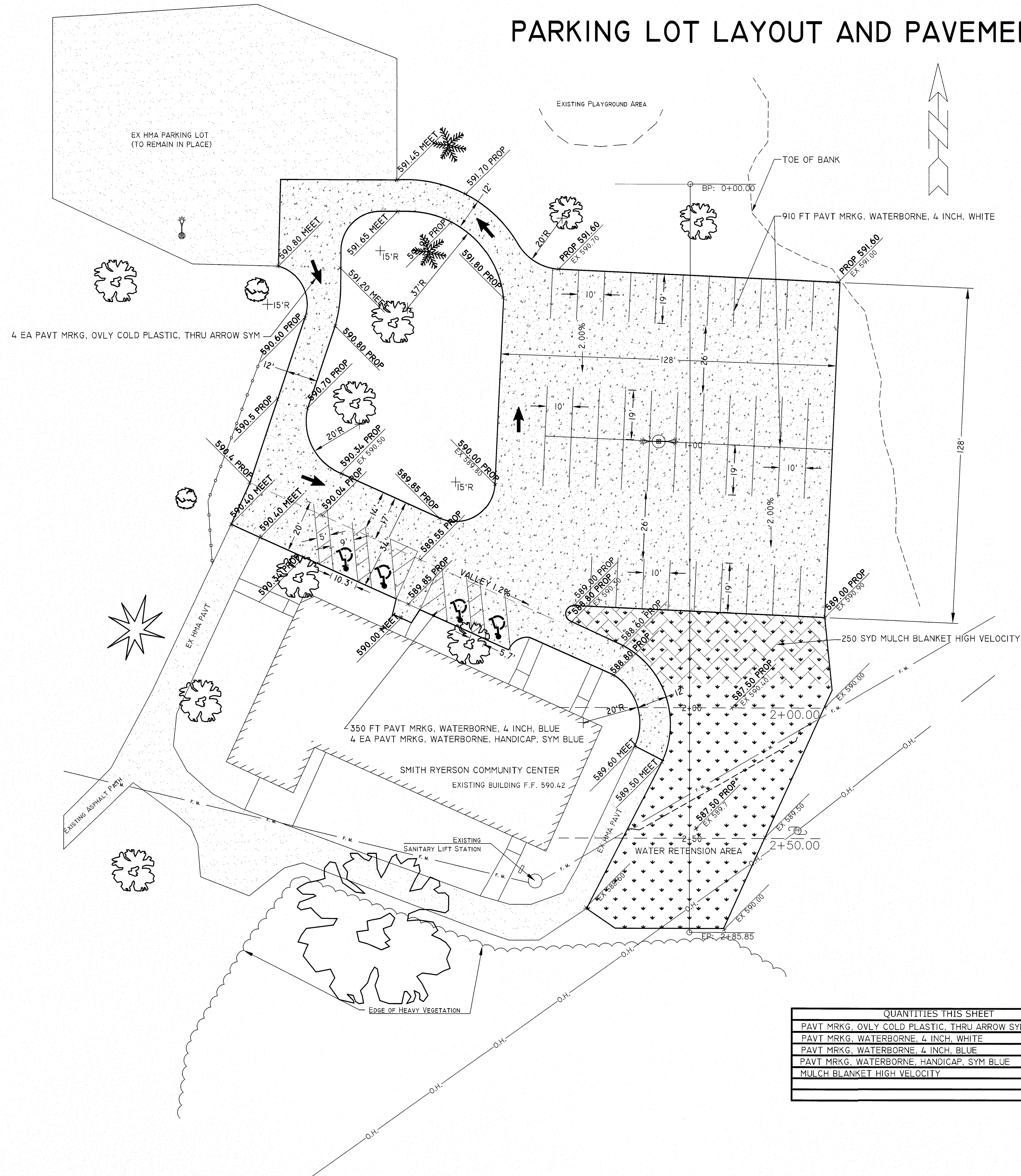


QUANTITIES THIS SHEET		
SALV CRUSHED MATERIAL, MODIFIED	2400	SYD
EXCAVATION EARTH	950	CYD
EROSION CONTROL, SILT FENCE	400	FT
AGGREGATE BASE, 6 INCH, MODIFIED	2700	SYD
AGGREGATE BASE	100	TON
HAND PATCHING	5	TON
HMA 13A	235	TON
HMA 36A	235	TON
TOPSOIL SURFACE, FURN. 4 INCH	1200	SYD
HYDROSEEDING	1200	SYD
PLASTIC DRUM, HIGH INTENSITY, FURN	20	EA
PLASTIC DRUM, HIGH INTENSITY, OPER	20	EA





# PARKING LOT LAYOUT AND PAVEMENT MARKING DETAIL

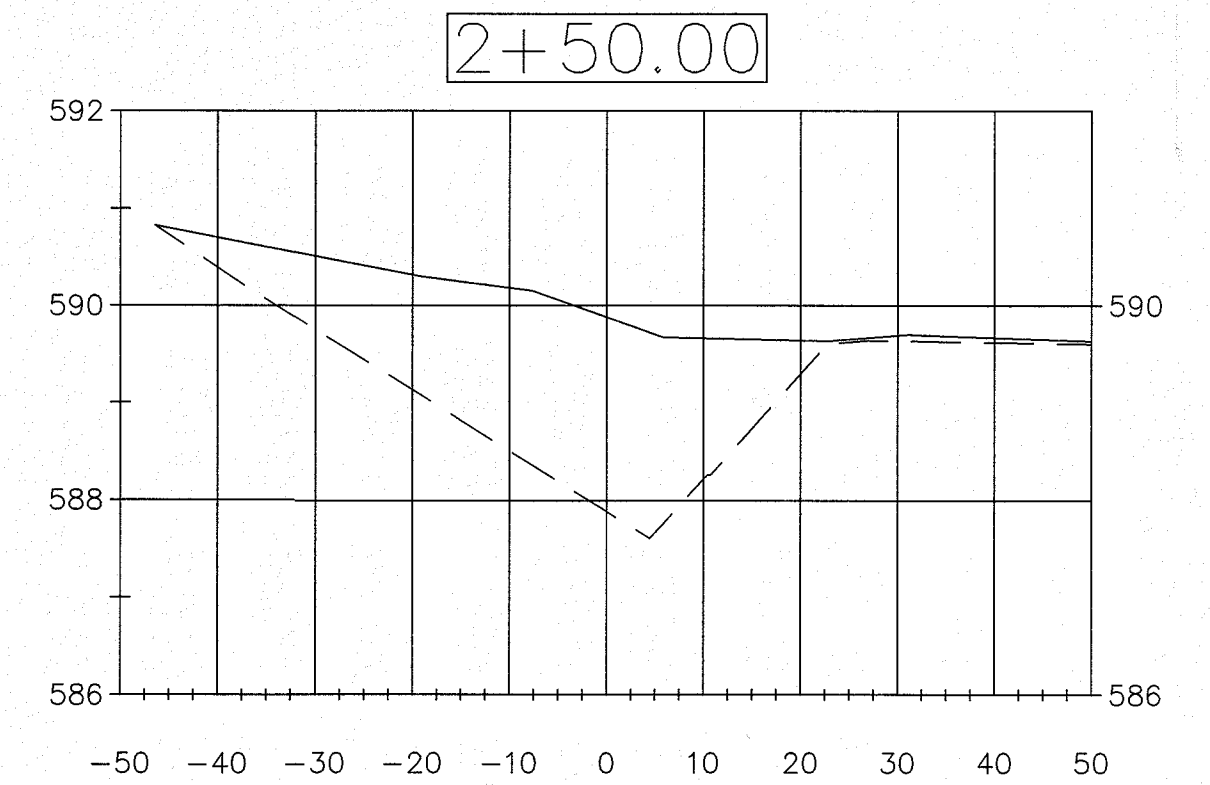
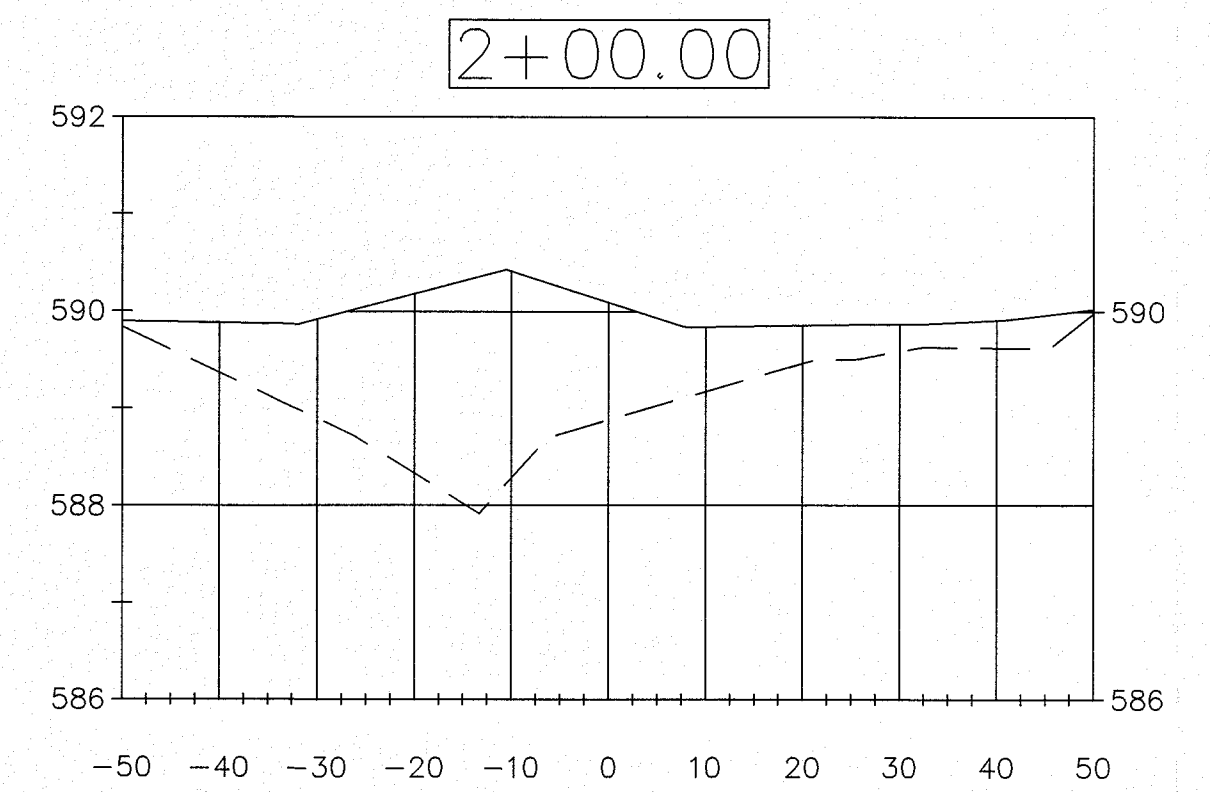


## HMA APPLICATION RATE

HMA MIX	RATE	PERFORMANCE GRADE	
HMA, 36A (TOP COURSE)	165# / SYD	64-28	1.5 INCH-I LIFT AWI 260, MIN
HMA, 13A (LEVEL COURSE)	165# / SYD	64-28	1.5 INCH-I LIFT
HMA HAND PATCHING (HMA, 4E3)	165# / SYD	64-28	1.5 INCH-I LIFTS

HMA BOND COAT, SS-IH, AT 0.05 GAL/SY, SHALL BE PLACED BETWEEN EACH LIFT THE COST IS INCLUDED WITH THE HMA PAY ITEM.

## PROP CROSS-SECTION WATER RETENTION AREA

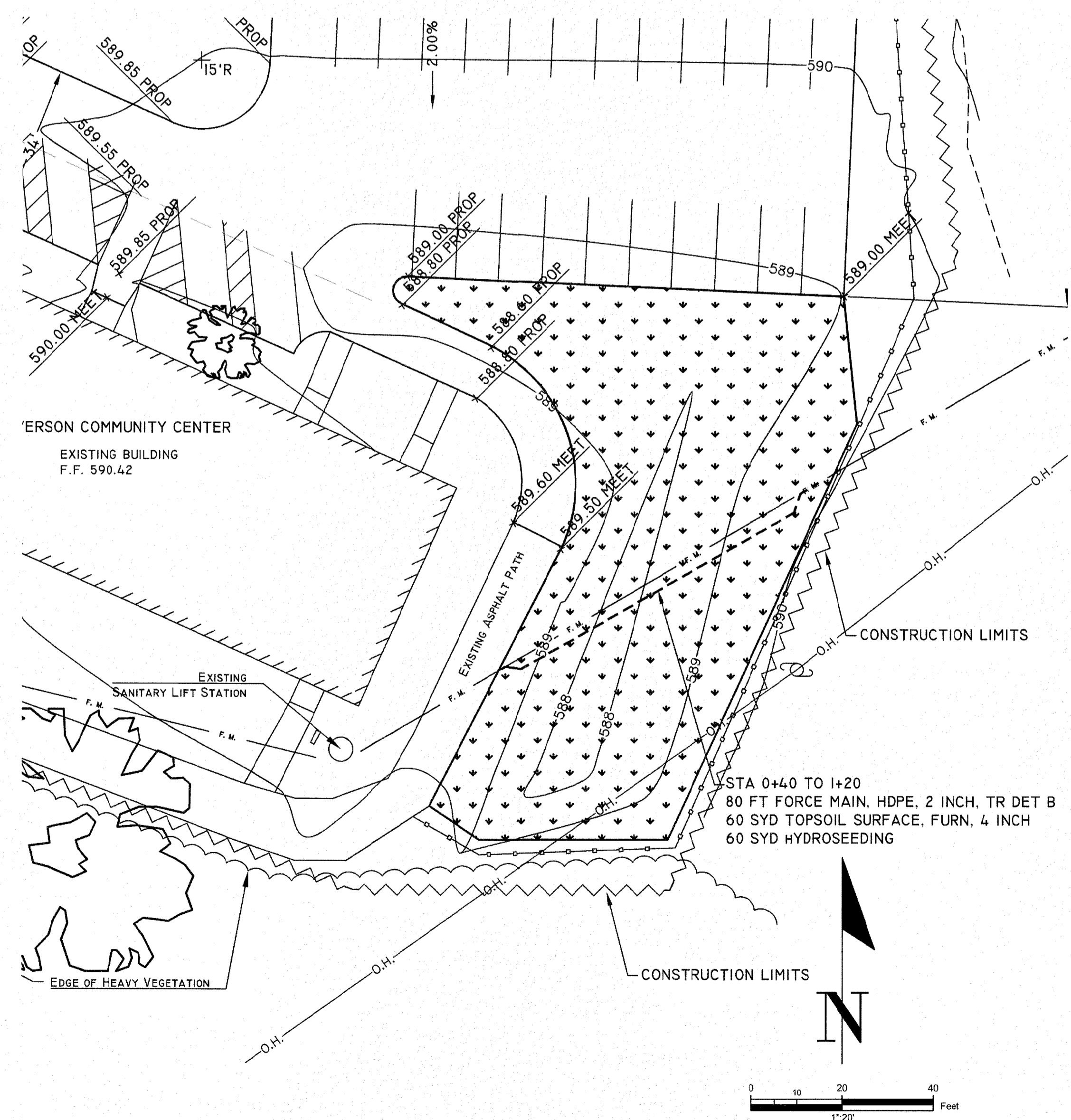


QUANTITIES THIS SHEET		
PAVT MRKG. OVLY COLD PLASTIC, THRU ARROW SYM	4	EA
PAVT MRKG. WATERBORNE, 4 INCH, WHITE	910	FT
PAVT MRKG. WATERBORNE, 4 INCH, BLUE	350	FT
PAVT MRKG. WATERBORNE, HANDICAP, SYM BLUE	4	EA
MULCH BLANKET HIGH VELOCITY	250	SYD

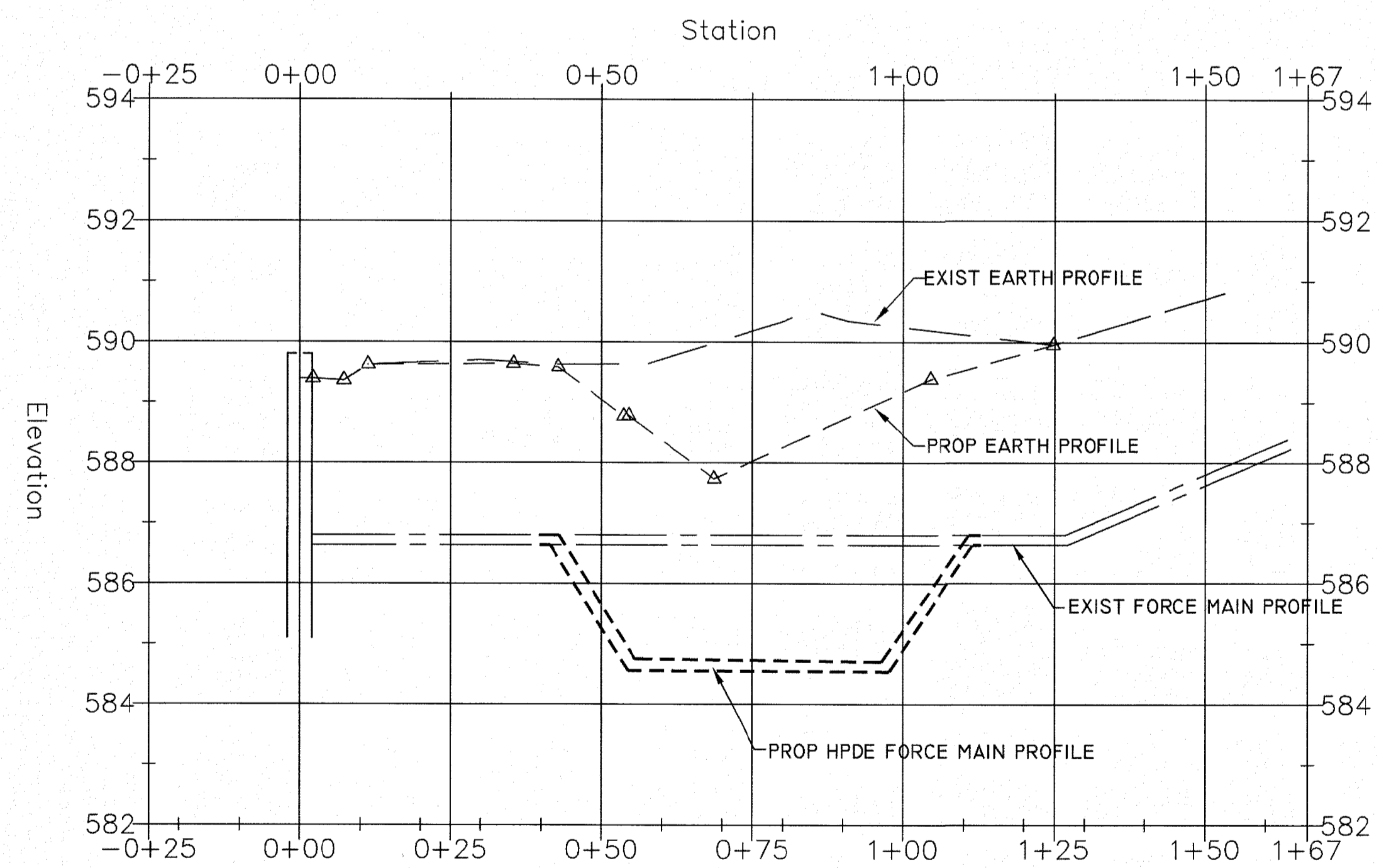
## CITY OF MUSKEGON OFFICE OF THE CITY ENGINEER SMITH RYERSON PARKING LOT

DRAWN	C. WIGGINS	JAN 19	REVISION	SURVEY		
CHECKED			REVISION	AS-BUILT		PROJECT NO. SP-240
APPROVED			REVISION	SCALE	1" = 20'	SHEET NO 3 OF 4

# UTILITY PLAN AND PROFILE



Sanitary Force Main PROFILE



QUANTITIES THIS SHEET		
FORCE MAIN, HDPE, 2 INCH	80	FT
TOPSOIL SURFACE, FURN. 4 INCH	60	SYD
HYDROSEEDING	60	SYD

CITY OF MUSKEGON OFFICE OF THE CITY ENGINEER		SMITH RYERSON PARKING LOT	
DRAWN	J BROOKENS 07/2018	REVISION	
CHECKED		REVISION	
APPROVED		REVISION	
SURVEY	H LARSON 07/2018	PROJECT NO	SP-240